

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference SENT2040014	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/SG2004/000032	International filing date (day/month/year) 3 February 2004	Priority date (day/month/year) 21 March 2003
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ G06F 17/60		
Applicant SENTIENT HEALTH PTE LTD et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 4 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:

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|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

Date of submission of the demand 19 October 2004	Date of completion of the report 23 February 2005
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SG2004/000032

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1 (b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☐ the international application as originally filed/furnished
 - ☒ the description:
 - pages 1-16 as originally filed/furnished
 - pages* received by this Authority on with the letter of
 - pages* received by this Authority on with the letter of
 - ☒ the claims:
 - pages as originally filed/furnished
 - pages* as amended (together with any statement) under Article 19
 - pages* 17-20 received by this Authority on 19 October 2004 with the letter of 19 October 2004
 - pages* received by this Authority on with the letter of
 - ☒ the drawings:
 - pages 1/10 - 10/10 as originally filed/furnished
 - pages* received by this Authority on with the letter of
 - pages* received by this Authority on with the letter of
 - ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to the sequence listing (*specify*):

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SG2004/000032

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-31	YES
	Claims	NO
Inventive step (IS)	Claims 1-31	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-31	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

- D1 "Inventory Management Business Models for Consignment Processes" July 1998
D2 Derwent Abstract PAN 02-471641 for WO 200241210-A1 published 23 May 2002
& PAJ Translation of publication number JP2002157315 &
Japanese Application Number 2000-350564

Novelty (N)

None of the citations explicitly disclose the features of the claims.

Inventive step (IS)

D1 discloses Inventory management business models for consignment processes. The management model considers how to track consigned inventory (see page 6) and not consigned inventory (eg. allocated inventory or safety stock). D1 does not appear to address the problem of accounting for the fact that the arrival of stock (from an alternative source) may not be recorded. This problem is identified in the present patent application (see present PCT application page 13 where this problem is identified) and a solution is defined in the present claims.

D2 discloses reconciling quantities of stock on-hand or consigned goods along with identifying labels. D2 has an update consignment inventory process that includes "A number input means of stock-on-hand arrival of goods to input the number of the stock on hand that arrives from a supplier ...". The system of D2 records and clearly identifies the differences between stock items that are consigned (and at the buyer's location) and the non-consignment items (at the buyer's location). However D2 does not suggest tracking and reconciling the unrecorded items.

Since the defined solution is not explicitly suggested in the combination of D1 and D2 the claims have the required inventive step.

Industrial applicability (IA)

The application has an industrial application (eg. in the tracking of consigned inventory).

The claims:

1. A consignment inventory management and reconciliation system wherein there is tracking and reconciliation of:
 - a. first items shipped to a buyer from a seller and that are located at the buyer's consignment inventory location;
 - b. second items shipped to the buyer by the seller, that have not been billed by the seller and cannot be found at the buyer's consignment inventory location; and
 - c. third items not shipped to the buyer by parties other than the seller, the third items can be found at the buyer's consignment inventory location, and are of the same identity as items provided on consignment by the seller to the buyer.
2. A system as claimed in claim 1, wherein the system also ages the first items, the second items, and the third items.
3. A system as claimed in claim 1, wherein there is tracking of one or more selected from the groups consisting of: item number, item lot number, and item expiry date.
4. A system as claimed in claim 3, wherein tracking takes place whenever a transaction is processed.
5. A system as claimed in claim 3, wherein the transaction is represented by a transaction description and a transaction amount.
6. A system as claimed in claim 5, wherein the transaction amount can be one: zero, a positive number, and a negative number, with a number of decimal places.
7. A system as claimed in claim 4, wherein the transaction is one or more selected from the group consisting of: bill, use, dispose, return, transfer-out, receive, transfer-in, order, set, and current.
8. A system as claimed in claim 7, wherein bill is used when the item is no longer at the buyer's consignment location but ownership has not been transferred from the seller to the buyer.
9. A system as claimed in claim 7, wherein use is used when the buyer has used the item and the process of transferring ownership from the seller to the buyer should be initiated or has been completed.

10. A system as claimed in claim 7, wherein dispose is used when the item is no longer at the buyer's consignment location and seller is writing off the item; ownership will not be transferred from the seller to the buyer.
11. A system as claimed in claim 7, wherein receive is used when the item is physically being moved from the seller to the buyer's consignment location; ownership will not be transferred from the seller to the buyer.
12. A system as claimed in claim 7, wherein transfer-in is used when the item is physically being moved to the buyers consignment location from a third party location; ownership will not be transferred from the seller to the buyer.
13. A system as claimed in claim 7, wherein return-in is used when the item is physically being moved from the buyer's consignment location back to the seller; ownership will not be transferred from the seller to the buyer.
14. A system as claimed in claim 7, wherein transfer-out is used when the item is physically being moved from the buyer's consignment location to a third party location; ownership will not be transferred from the seller to the buyer.
15. A system as claimed in claim 7, wherein order is used when a result has been made to increase the buyer's consignment item(s) quantity.
16. A system as claimed in claim 7, wherein set is used when the quantity of items that the seller and the buyer agree is at the consignment location and is used as a starting point for consignment inventory On-hand quantity.
17. A system as claimed in claim 7, wherein count is used when the quantity can be physically found and verified by the seller and buyer at the buyer's consignment location at a time.
18. A system as claimed in claim 1, wherein reconciliation takes place after a stock count process.
19. A system as claimed in claim 18, wherein the reconciliation notes the second items as Unbilled and the third items as Excess to enable the seller to track quantities of second items and third items over time to provide a more accurate history of consignment inventory.

20. A system as claimed in claim 3, wherein the seller uses the tracking of the item lot number and item expiry date to determine which of the first and second items are approaching an expiry date and thus need to be adjusted.
21. A system as claimed in claim 1, wherein the first items are grouped together in a plurality of categories.
22. A system as claimed in claim 1, wherein the second items are grouped together in a plurality of categories.
23. A system as claimed in claim 1, wherein the third items are grouped together in a plurality of categories.
24. A system as claimed in claim 21, wherein adjustment is according to one or more of the plurality of categories.
25. A system as claimed in claim 1, wherein an inventory total is the sum of the first items and the second items, less the third items.
26. A consignment inventory management and reconciliation system wherein there is tracking and reconciliation of:
 - (a) first items shipped to a buyer from a seller and that are located at the buyer's consignment inventory location; and
 - (b) second items shipped to the buyer by the seller that have not been billed by the seller and cannot be found at the buyer's consignment inventory location.
27. A system as claimed in claim 26, wherein there is also tracking and reconciliation of third items not shipped to the buyer by the seller, that can be found at the buyer's consignment inventory location, and are of the same identity as items provided on consignment by the seller to the buyer.
28. A consignment inventory management and reconciliation system wherein there is tracking and reconciliation of:
 - (a) first items shipped to a buyer from a seller and that are located at the buyers consignment inventory location; and

- (b) third items ~~not~~ shipped to the buyer by parties other than the seller, the third items can be found at the buyer's consignment inventory location, and are of the same identity as items provided on consignment by the seller to the buyer, wherein second items can also be found at the buyer's consignment inventory location.
29. A system as claimed in claim 28, wherein there is also tracking and reconciliation of second items shipped to the buyer by the seller, that have not been billed by the seller and cannot be found at the buyer's consignment inventory location.
30. A consignment inventory management and reconciliation system wherein there is tracking and reconciliation of:
- (a) second items shipped to the buyer by the seller, that have not been billed by the seller and cannot be found at the buyer's consignment inventory location; and
 - (b) third items shipped to the buyer by parties other than the seller, the third items can be found at the buyer's consignment inventory location, and are of the same identity as items provided on consignment by the seller to the buyer.
- wherein first items can also be found at the buyer's consignment inventory location.
31. A computer useable medium having a computer program code that is configured to cause a processor to execute one or more functions to perform the process steps as defined in claim 1.